Amendments to the Specification

Please amend the first paragraph on Page 2 of the specification, i.e., Page 2, Lines 1-3 as follows:

"- so-called main beam or cruising lighting, which illuminates the road comprehensively over a long distance, of about 200 ~~metres~~ meters, which is considered as being infinity for the driver, and"

Please amend the second paragraph on Page 2 of the specification, i.e., Page 2, Lines 4-6) as follows:

"- so-called dipped beam or passing lighting, which illuminates the road over a short distance of the order of 60 ~~metres~~ meters, so as to avoid dazzling of people who may be situated on the road or in roadside areas."

Please amend the fourth paragraph on Page 2 of the specification, i.e., Page 2, Lines 10-20) as follows:

"Passing or dipped beam lighting is obtained by means of passing headlights, also called dipped headlights, each of which directs a sheet of light downwards so as to give visibility over a distance of the order of 60 to 80 ~~metres~~ meters. The patch of descending light has the object of avoiding dazzling of anybody, on foot or in a vehicle travelling in the opposite direction, who may be within the road scene which extends ahead of the vehicle. However, such a path of downwardly directed light offers only reduced visibility to the driver of the vehicle ahead of the vehicle. This lighting is often insufficient to enable the driver to have good visibility of the whole of the road scene in order that he is able to anticipate any bends or any possible obstacles."

Please amend the first paragraph on Page 3 of the specification, i.e., Page 3, Lines 4-17) as follows:

"However, there does exist a headlight which enables the main lighting beam of the vehicle to be modulated on the road. Such a headlight is described in patent applications DE 199 07943 and US 5,938,319. This headlight enables there to be projected on the road a light indication such as an arrow, in order to indicate for example the direction that the driver must follow. This indication is then lit while the zone that surrounds it is dark, that is to say it is unlit. Such a light indication is produced by means of a headlight which includes a plurality of micromirrors having dimensions of the order of one tenth or one hundredth of a ~~millimetre~~

millimeter. In other words, the headlight enables the light projected on the road to be modulated. However, it only permits modulation of the light over part of the main beam. It does not permit control of the modulation of the whole of the light beam emitted by a conventional main beam lighting system."

Please amend the bridging Pages 8 and 9 of the specification, i.e., Page 8, Line 25, through Page 9, Line 3) as follows

"This zone is lit above the cut-off line by a beam which is additional to that from a standard main beam light. This additional beam is generally quite wide, its intensity being of a mean value with respect to an ordinary cruising beam (for example 5 to 30 lux, or 10 to 20 lux intensity, as compared to intensity of the order of 40 to 80 lux for a standard cruising beam), and it has a range which is for example of the order of 50 to 80 ~~metres~~ meters. It is conventionally designed by the term "complementary main beam" or "ambient main beam"."

Please amend the paragraph bridging Pages 10 and 11 of the specification, i.e., Page 10, Line 20, through Page 11, Line 9) as follows:

"Figure 3 shows one embodiment of the optical system 1 for the headlight according to the invention. This optical system 1 comprises a light generator or light source 10. This light source may for example be a discharge lamp or an elliptical source, such as a xenon lamp such as is conventionally found in current vehicles. The light source 10 is connected to the imager 12 through a light guide 11. The light guide may be an optical ~~fibre~~ fiber of large cross section. The guide may also, as in the preferred embodiment of the invention, be a matrix of optical ~~fibres~~ fibers carrying the light from the light source to the imager 12. The light guide may also be used for the purpose of reducing the quantity of infrared light issued by the light source, for the purpose of limiting heat of the imager. It may also be used for the purpose of making the light drawn from the light source uniform in front of the imager. The imager either does not pass light, according to whether the light beam reaches a zone of the imager that is with or without a screen. Once the light has passed through the imager 12, it is then transmitted through an optic 13 of the headlight towards the road to be lit. The optic 13 may be a light diffusing lens."

Please amend the paragraph bridging Pages 14 and 15 of the specification, i.e., Page 14, Line 24, through Page 15, Line 6, as follows:

"In this embodiment, the optical system 1 comprises a light source 10 and an imager 12, which are joined together through a light guide 11 having two light paths 16 and 17. These two light paths may be two matrices of optical ~~fibers~~ fibers, or two optical ~~fibres~~ fibers of large cross section. The first optical ~~fibre~~ fiber matrix 16 is adapted to guide the light from the light source to the imager 12. That part of the light beam which has passed through the imager 12 is then broadcast outside the headlight through an output optic 15a, which may for example be a diffusing lens similar to the lens 13 in Figure 3."

Please amend the first full paragraph on Page 15 of the specification, i.e., Page 15, Lines 7-10) as follows:

"The second optical ~~fibre~~ fiber matrix 17 is adapted to lead the light from the light source 10 directly to an output optic of the headlight, which has the reference numeral 15b. This optic 15b may be identical to the optic 15a."

Please amend the second and third consecutive full paragraphs on Page 16 of the specification, i.e., Page 16, Lines 14-23) as follows:

"In the embodiment of Figure 5, the light beam is transmitted through optical ~~fibers~~ fibers from the light source 10 to the imager 12 through a block or bar 18 of quartz or glass, the purpose of which is to make the light beam homogenous and to reduce its infrared radiation. In other words, this quartz or glass block or bar 18 prevents the imager 12 from receiving excessive energy which would be detrimental to the way it works.

Such a quartz or glass block or bar 18 may also be inserted between the optical ~~fiber~~ fiber matrix 11 and the imager 12, in the optical system of Figure 3.

Please amend the paragraph bridging Pages 16 and 17 of the specification, i.e., Page 16, Line 24, through Page 17, Line 2, as follows:

It should also be noted that the use of a discharge lamp as the light source 10 enables problems due to excessive temperature on the imager to be avoided, since a discharge lamp is a cold source. Moreover, transport of

the light through optical ~~fibers~~ fibers also enables any heat to be diminished in the light emitted by the light source 10."

Please amend the two consecutive paragraphs beginning on Page 17, Line 19, of the specification and ending on Page 18, Line 17, of the specification, i.e., Page 17, Line 19, through Page 18, Line 17) as follows:

"In a further embodiment of the invention, it is arranged that the optical ~~fibers~~ fibers are displaced vertically by a small distance in the focal plane of the optic 13, so as to modulate the light and thereby form light beams which are compatible with the "adverse weather lighting" or "motorway lighting" functions, that is to say the functions of lighting in rain or lighting on motorways.

Figures 6 to 9 illustrate a further version of the invention, which makes use of an imager 12 consisting of a matrix of lenses, the focal length of which is electrically controllable. Its principle is as follows: as shown in Figure 6, a lens is formed by placing between two walls 21, of glass or transparent plastics material, a liquid conductor 20 (water) and a drop of a liquid 23 which is non-miscible with water (an oil). YY represents the optical axis, and a support 22 is provided. Under the effect of an electric field which is applied in an appropriate way, the drop of oil has a variable profile, because it moistens in a differing way the wall on which it has been deposited, and this modifies the focal length of the lens which itself consists of this oil drop. Two possible profiles are shown respectively by a continuous line and a broken line. Figure 7 shows variation in lens power (in ~~dioptres~~ diopters) of the lens as a function of the applied voltage: the amplitude of variation is very high. Figures 8 and 9 represent the whole of the optical system in a similar way to Figure 5 and with the same references: an optical ~~fiber~~ fiber system 17 is used in association with the imager 12, using a matrix of lenses the same as in Figure 6. Figure 9 shows how one of the lenses changes shape according to whether the voltage applied to it is 0 or 10 volts."